CLAIMS

1. A method for producing pestivirus-like particles *ex vivo* comprising the steps of:

- providing a first nucleic acid sequence comprising a packaging competent retroviral-derived genome;

- providing a second nucleic acid sequence comprising a cDNA encoding core proteins from said retrovirus;

- providing a third nucleic acid sequence comprising a cDNA encoding a polyprotein comprising successively a pestivirus core protein, and a Erns protein and/or a pestivirus E1 protein and/or a pestivirus E2 protein, and optionally a pestivirus p7 protein;

- transfecting host cells with said nucleic acid sequences and maintaining the transfected cells in culture for sufficient time to allow expression of the cDNAs to produce structural proteins from pestivirus and retrovirus; and allowing the structural proteins to form virus-like particles.

2. The method according to claim 1, wherein said packaging competent retroviral-derived genome and core proteins are from a retrovirus selected from the group consisting of MLV, ALV, RSV, MPMV, HIV-1, HIV-2, SIV, EIAV, CAEV, or HFV.

3. The method according to claim 1 or 2, wherein core, Erns, E1 and E2 pestivirus proteins, and optionally p7 pestivirus protein, are derived from a same pestivirus.

4. The method according to any of preceding claims, wherein said pestivirus is selected from the group consisting of bovine viral diarrhea virus, swine fever virus, and border disease virus.

5. An infectious pestivirus-like particle obtainable by a method according to any of preceding claims, comprising the core proteins from a retrovirus, and a Erns pestivirus protein and/or a E1 pestivirus protein and/or a E2 pestivirus protein, and optionally a p7 pestivirus protein.

6. The infectious particle according to claim 5, wherein Erns, E1 protein and E2 protein, and optionally p7 pestivirus protein, are derived from a same pestivirus.

7. The infectious particle according to claim 6, wherein said pestivirus is selected from the group consisting of bovine viral diarrhea virus, swine fever virus, and border disease virus.

8. The infectious particle according to any of claims 5 to 7, wherein said retrovirus is selected from the group consisting of MLV, ALV, RSV, MPMV, HIV-1, HIV-2, SIV, EIAV, CAEV, or HFV.

9. Use of three nucleic acid sequences for the preparation of a medicament useful as a vaccine against a pestivirus infection, wherein the nucleic acid sequences are :

- a first nucleic acid sequence comprising a packaging competent retroviral-derived genome;

- a second nucleic acid sequence comprising a cDNA encoding core proteins from said retrovirus;

- a third nucleic acid sequence comprising a cDNA encoding a polyprotein comprising successively a pestivirus core protein, and a pestivirus Erns protein and/or a pestivirus E1 protein and/or a pestivirus E2 protein, and optionally a pestivirus p7 protein ;

and, when transferred into cells of a subject, the nucleic acids sequences allow the production of structural proteins from pestivirus and retrovirus, wherein the structural proteins form virus-like particles that are immunogenic.

10. The use according to claim 9, wherein said pestivirus is selected from the group consisting of bovine viral diarrhea virus, swine fever virus, and border disease virus.